NASA

Strategic Evolution of ESE Data Systems (SEEDS)

Third Public Workshop

March 18 - 20, 2003, Annapolis, MD

Presented By

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SEEDS Formulation Team

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SEEDS Web Page http://eos.nasa.gov/seeds

Today's Presentation



- □ Path to today
- □ Agenda walkthrough
- □ Draft recommendations (high level overview)
- □ Status of comments
- □ Scope of SEEDS
- □ Goals for SEEDS 3

Path to Today - SEEDS Charter



- Establish a strategy and coordinating program to evolve the ESE network of data systems and service providers in the 2004 to 2015 timeframe which
 - > Ensures the timely delivery of Earth Science information at an affordable cost.
 - > Maximizes availability and utility of ESE products.
 - > Fully engages the community on data management issues, objectives, and solutions.
 - > Assures continued effectiveness of an increasingly distributed and heterogeneous network of ESE funded systems and services.



Formed seven study teams:

- > Cost Estimation and Levels of Service
- > Standards and Interfaces for Near Term Missions
- > Standards and Interfaces for Future Missions
- > Life Cycle Data Management for Long Term Archive
- > Software Reuse and Reference Architecture
- > Technology Needs and Infusion Planning
- > Metrics Planning and Reporting

Study Team Approach:

- > Survey existing practices, capabilities, and lessons learned.
- > Engage the community as participants and consultants:
 - Clarifying technical areas / questions to be addressed.
 - Identifying science concerns / issues pertinent to the study.
 - Developing and reviewing options to address concerns / questions.
 - Developing and refining SEEDS recommendations.
- > Present and discuss plans, progress, recommendations at SEEDS Public Workshops.
- > Refine survey, questions, recommendations in response to community feedback.

Path to Today



□ Provided multiple opportunities for community involvement & comment:

- > Community engaged as participants and consultants on seven study teams.
- > Community are also contributors of white papers, workshop attendees, and survey respondents.
- > Held 2 public workshops (University of Maryland, San Diego).
- > Presented SEEDS plans and status to NASA advisory committees.

Published draft recommendations on web:

- > SEEDS Web Page http://eos.nasa.gov/seeds/
- > Main body of recommendations organized into 7 chapters (74 pages).
- > Background information provided in appendix (300 pages).

Path to Today - Milestones

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July-1998	ESE AA constituted a "New Data and Information Systems and Services" Strategy Team.	
Sept-2000	Initiated NewDISS formulation effort.	
Feb to July-2001	Formed SEEDS Study Teams.	
June to Oct-2001	Initiate study tasks.	
Oct to June-2002	Surveyed current practices.	
Feb-2002	Published SEEDS web page.	
	Held 1st public workshop (University of Maryland)	
June-02	Held 2nd public workshop (San Diego)	
July-02	NewDISS strategy team released final NewDISS recommendations document.	
July to Sept-02	Prepared SEEDS guidelines for REASoN CAN.	
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July to Oct-02	Develop draft recommendations for unifying framework.	
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July to Oct-02 Oct-02 Jan-03	Develop draft recommendations for unifying framework. Present draft recommendations to ESISS. Publish draft recommendations on web.	
July to Oct-02 Oct-02 Jan-03 Mar-03	Develop draft recommendations for unifying framework. Present draft recommendations to ESISS. Publish draft recommendations on web. Hold 3rd public workshop (Annapolis).	
July to Oct-02 Oct-02 Jan-03 Mar-03 April-03	Develop draft recommendations for unifying framework. Present draft recommendations to ESISS. Publish draft recommendations on web. Hold 3rd public workshop (Annapolis). Finalize recommendation for unifying framework.	
July to Oct-02 Oct-02 Jan-03 Mar-03 April-03 Mar to July-2003	Develop draft recommendations for unifying framework. Present draft recommendations to ESISS. Publish draft recommendations on web. Hold 3rd public workshop (Annapolis). Finalize recommendation for unifying framework. Evaluate options for Execution Phase.	
July to Oct-02 Oct-02 Jan-03 Mar-03 April-03 Mar to July-2003 May-03	Develop draft recommendations for unifying framework. Present draft recommendations to ESISS. Publish draft recommendations on web. Hold 3rd public workshop (Annapolis). Finalize recommendation for unifying framework. Evaluate options for Execution Phase. Presentation to ESISS.	



Agenda - March 18



Time	Event	Speaker/Moderator	Location
8:30	Welcome/Logistics	SEEDS Team	Calvert and East
		Member	Chamber
9:00	Welcome from HQ	Dr. Mary Cleave,	Calvert and East
		Deputy AA for Earth	Chamber
		Science, Advanced	
		Planning	
9:15	An Overview of the Data Roadmap	Martha Maiden,	Calvert and East
	Effort	Program Executive,	Chamber
10.00	D 1	NASA HQ	
10:00	Break	D C 1 177	0.1 (15)
10:30	Workshop Expectations & SEEDS	Dr. Stephen Wharton,	Calvert and East
	Draft Recommendations	SEEDS Formulation	Chamber
12.00	T and also	Team Manager	
12:00	Lunch	D. J. D. D. Line	Calvert and East
1:00	The ESIP Federation: Sustainability	Dave Jones, President,	
1:45	in the Era of SEEDS	ESIP Federation	Chamber Calvert and East
1:45	Employing Standards in Support of	David Etter, ESIP III	Chamber
	Dynamic Assembly of SEEDS Components	Bay Area Shared Information	Chambel
	Components	Consortium (BASIC)	
2:15	Global Grid Forum Standards	William Johnston,	Calvert and East
2.13	Process	Senior Scientist,	Chamber
	1100033	Lawrence Berkeley	Chamber
		National Laboratory,	
		University of	
		California	
3:00	Break		
3:30	Simultaneo	ous breakout sessions	
	Levels of Service	Kathy Fontaine,	Calvert and East
		SEEDS FT	Chamber
	Life Cycle	Ken McDonald,	West Chamber
		SEEDS FT	
	Technology Infusion 1	Karen Moe, SEEDS	Jonas Green
		FT	
5:00	Adjourn		
	Dinner on your own		

Agenda - March 19



Time	Event	Speaker/Moderator	Location
9:00	Aura DSWG Standards Lessons-	Cheryl Craig,	Calvert and East
	Learned	HIRDLS Project,	Chamber
		National Center for	
		Atmospheric Research	
9:45	Break		
10:15	Simultaneous breakout sessions		
	Metrics and Reporting 1	Rama Ramapriyan, SEEDS FT	Calvert and East Chamber
	Standards 1	Rich Ullman, SEEDS FT	West Chamber
	Reuse	Gail McConaughy, SEEDS FT	Jonas Green
12:00	Lunch		
1:00	Technology Infusion	Joseph Coughlan,	Calvert and East
		NASA Ames	Chamber
		Research Center	
1:45	Simultaneous breakout sessions		
	Technology Infusion 2	Karen Moe, SEEDS FT	Jonas Green
	Standards 2	Rich Ullman, SEEDS FT	West Chamber
3:15	Break		
3:45	Community Comment on Next Steps	Dr. Stephen Wharton,	Calvert and East
		SEEDS Formulation	Chamber
- 00		Team Manager	
5:00	Adjourn		
	Dinner on your own		



Time	Event	Speaker/Moderator	Location
9:00	Report-outs from all breakout	Breakout	Calvert and East
	sessions - 10 minutes each – max.	Representatives	Chamber
10:00	Break		
10:30	Remaining report-outs	Breakout leads	Calvert and East
	Actions from the meeting	SEEDS Formulation	Chamber
	Closing discussions	Team	
12:00	Meeting close		

Draft Recommendations



- □ Levels of Service: (Chapter 1)
 - > Identifies minimum and recommended levels of service for core data sets and services.
 - > Recommends that ESE adopt levels of service (and establish working group).
- □ Standards: (Chapter 2)
 - > Identifies science data, metadata, and interoperability standards for consideration.
 - > Describes process for SEEDS to develop, adopt, and evolve standards and interfaces.
 - > Recommends that ESE adopt the standards process (and establish working group).
- □ Cost Estimation & Benchmarking:

(Chapter 3)

- > Describes cost-by-analogy model to estimate cost of ESE data management services.
- > Recommends that ESE adopt model and acquire cost information from funded providers.
- □ Data Lifecycle Planning:

(Chapter 4)

- > Describes approach to safely migrate products from generation thru long term archive.
- > Recommends that ESE adopt the approach (need for a working group is TBD).
- □ Reuse Assessment:

(Chapter 5)

- > Defines approach for a SEEDS investment in software reuse.
- > Recommends that ESE adopt the reuse approach (and establish working group).
- □ Technology Prototyping & Infusion:

(Chapter 6)

- > Describes process to identify needs and infuse technology investments into ESE provider network.
- > Recommends that ESE adopt process, define SEEDS technology vision (and establish working group).
- Metrics Planning and Reporting:

(Chapter 7)

- > Defines metrics and reporting requirements for the participants in ESE Data Management Activities.
- > Recommends that ESE adopt the proposed metrics & requirements (and establish working group).

Status of Comments



- □ Received written comments from 6 people prior to the workshop.
- □ Types of comments range from:
 - > 'good job' to
 - > 'you left this out' to
 - > 'text edits and wordsmithing'.
- □ All comments will be dispositioned together
 - > Comments can be submitted any time this week via comment sheets, breakouts, etc.
 - > Comments can be sent via e-mail (to Kathleen.S.Fontaine@nasa.gov) through April 18.
 - > After the deadline, we'll work through all the comments then notify the author of the outcome.

SEEDS Office Notional Scope



Strategic Planning:

- > Support Code Y in development of Roadmaps, Priorities, and Plans.
- > Sustain forums to leverage community capabilities & ideas and to ensure community involvement.
- > Evolve unifying framework of policies, guidelines, and/or requirements for ESE data and information.

SEEDS Implementation:

- > Oversee implementation of the unifying framework.
- > Assist projects, coordinating entities, and distributed service providers in the interpretation of unifying framework guidelines.
- > Compile metrics and report utilization and impact of ESE-funded products and services.
- > Support Code Y-led solicitations to sustain community-based providers of products & services.

□ SEEDS Planning & Coordination:

- > Assure continued effectiveness of an increasingly distributed and heterogeneous network of ESE funded systems and services.
- > Promote development of a measurement focused network of product and service providers.
- > Promote exchange of products, services, ideas across projects & agencies.

Goals for Third Workshop



- □ Provide forum for comment & discussion of the draft recommendations.
- Develop charters/draft charters for execution phase working groups.
- Present various views community-based standards and technology processes.
- Gather your inputs into our proposed next steps (during the Wednesday afternoon plenary session).

We look forward to having your continued involvement and support in completing SEEDS formulation and beginning the execution phase.